IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claims 1-4 (canceled).

5. (previously presented) A group communication method in which a plurality of communication terminals form a closed communication network and perform communication, said group communication method comprising:

a step in which a calling message including group identification information is broadcast from a first communication terminal to a large number of unspecified communication terminals; and

a step in which the first communication terminal receives response messages broadcast from other communication terminals and including the group identification information,

wherein the closed communication network is formed of the first communication terminal and at least one communication terminal which transmits the response message within a given time after the calling message is transmitted,

wherein a group communication is performed by the communication message using the group identification information,

wherein the group communication method includes a step in which the first communication terminal stores an address of the transmission source terminal of the response message received within a given time after transmitting the calling message as a group constituting terminal corresponding to the group identifier, and a

step in which a control message indicative of the start of the group communication is transmitted to the group constituting terminal from the first communication terminal,

wherein the group communication method includes a step in which, before the transmission of the control message indicative of the start of the group communication, an encryption key to be used in the group communication is informed from the first communication terminal to the group constituting terminal, and

wherein the group communication method further includes a step in which respective group constituting terminals including the first communication terminal respectively measure an encryption key change timing at random and when time reaches the encryption key change timing before receiving a keep-alive message from other terminal, the keep-alive message including the group identifier is broadcast, a step in which the terminal which becomes a transmission source of the keep-alive message informs a transmission source terminal of the response message to keep-alive message of a new encryption key, and a step in which the terminal which becomes transmission source of the keep-alive message transmits a control message which indicates the state of the group communication after the lapse of a given time from the transmission of the keep-alive message, wherein the encryption key to be used in the group communication is changed over in response to the transmission of the control message.

Claims 6-11 (canceled.